



CLEAN COPY OF CLAIMS PENDING IN U.S. PATENT APPLN. NO. 09/844,270

Our Ref: 839-1028

(Currently Amended) A system for digitization of field service engineering work processes in a power plant having a gas turbine, comprising:

at least one processor system having a controller, said at least one processor system receiving power plant data, and said controller controlling said gas turbine;

at least one wireless communications interface device communicatively coupled to said at least one processor system for wirelessly communicating the data received from the power plant by the processor system to at least one of a mobile computer system or a wireless computer system carried by a mobile user;

said controller capable of receiving instructions from at least one of said mobile computer system or said wireless computer system carried by a mobile user to control the gas turbine, wherein field service engineering work processes including inspection, monitoring and controlling a power plant gas turbine may be performed using said mobile computer system or said wireless computer system carried by said mobile user; and

a local area network (LAN) in communication with said at least one wireless communications interface device;

at least one terrestrial orbiting satellite antenna assembly having a transceiver system for transmitting and receiving signals from said at least one wireless communications interface device; and

a network server computer system communicatively coupled to said at least one terrestrial orbiting satellite communications antenna assembly via a wide area communication network, said server computer system including a database for storing application data accessible by the mobile user, wherein a mobile user roving on site at a power plant location remote from network server computer system may wirelessly communicate with both said gas turbine

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controller and said network server for performing service engineering work processes including uploading and/or downloading computer software applications and data for performing inspection, operation or control of one or more gas turbine processes.

2. (Previously Presented) The system of claim 1 wherein said at least one wireless communications interface device is a wireless access point device, and said wireless computer system carried by said mobile user is a wearable computer.

3. (Original) The system of claim 2 wherein said access point device is capable of communicating the data received from the processor system to the server computer via said LAN.

4. (Previously Presented) The system of claim 1 wherein said LAN comprises:
a wireless network; and
a wireless hub router.

5. (Previously Presented) The system of claim 4 wherein said LAN is linked to said at least one terrestrial orbiting satellite communications antenna assembly via an internet protocol (IP) data interface.

6. (Previously Presented) The system of claim 5 further comprises:
a private branch exchange network (PBX);
a voice over IP (VOIP) gateway coupled to said PBX; and

an ethernet interface coupled said VOIP gateway and said IP data interface.

7. (Previously Presented) The system of claim 1 wherein said network server computer system comprises:

at least one router; and

an ATM network communicatively coupled to said at least one router.

8. (Previously Presented) The system of claim 7 further comprises:

a wide area network (WAN) coupled to said at least one router for communicating data from said network server computer system to said terrestrial orbiting satellite communications antenna assembly via an orbiting satellite.

9. (Previously Presented) The system of claim 2 wherein said wireless access point device is capable of operating on DC power.

10. (Currently Amended) A field engineering communication network for enabling a mobile field service engineer working at a power plant having a gas turbine to monitor operational parameters of the gas turbine and to upload and/or download computer software applications and operational parameter data to/from a remote server for performing on-site inspection, operation or control of the gas turbine via a wireless mobile device, said network comprising:

a controller processor system at said power plant to control the gas turbine; and

at least one wireless communications access point interface communicatively coupled to said controller processor system, said interface communicating wirelessly with at least one of a mobile computing system and a wearable computer carried by a mobile user, said controller processor system providing operational parameter data and receiving instructions from one of said mobile computing system and a wearable computer carried by a mobile user for performing on-site inspection, operation or control of the gas turbine, wherein appropriate computer software applications, control data or instructions for controlling the operation of the gas turbine may be provided to at least one of said mobile unit and a wearable computer via wireless communications from a remote server.

11. (Previously Presented) The system of claim 10 further comprises:

a local area network(LAN) in communication with said at least one wireless communications access point interface;

at least one terrestrial satellite communications antenna assembly having a transceiver system for transmitting and receiving signals from said at least one wireless communications access point interface; and

at least one network server computer system communicatively coupled to said at least one terrestrial satellite communications antenna assembly via an orbiting satellite communication link, said server computer system including a database for storing application data accessible by the mobile user.

12. (Previously Presented) The system of claim 11 wherein said LAN comprises:

a wireless network; and

a wireless hub router.

13. (Previously Presented) The system of claim 12 wherein said wireless network is linked to said at least one terrestrial satellite communications antenna assembly via an internet protocol (IP) data interface.

14. (Previously Presented) The system of claim 13 further comprises:

a private branch exchange network (PBX);

a voice over IP (VOIP) gateway coupled to said PBX; and

an ethernet interface coupled to said VOIP gateway and said IP data interface.

15. (Previously Presented) The system of claim 11 wherein said server computer system comprises:

at least one router;

a packet switching network communicatively coupled to said at least one router; and

a wide area network (WAN) coupled to said at least one router for communicating data from said server computer system to said terrestrial satellite communications antenna assembly.

16. (Currently Amended) In a power plant of the type having a gas turbine and at least one processor system for controlling the gas turbine, a method of enabling a mobile field service engineer to monitor and control the gas turbine via a wireless mobile device, comprising:

monitoring and collecting gas turbine operational parameter data by said at least one processor system;

forwarding the received data to at least one of a mobile unit and a wearable computer carried by a mobile user via wireless communications;

inspecting the received data to assess gas turbine operability;

receiving from a remote server via wireless communications, by at least one of said mobile unit and a wearable computer via a wireless network, application software and/or data for controlling the operation of the gas turbine; and

instructing said at least one processor system via wireless communications from at least one of said mobile unit and a wearable computer to vary the gas turbine operation in accordance with said received application software or data.

17. (Previously Presented) The method of claim 16 further comprises:

forwarding power plant data to a remote user via a wireless communication network.

18. (Original) The method of claim 17 wherein the power plant operation is varied by varying the operation of the gas turbine.

19. (Original) The method of claim 16 wherein said interface device is a wireless access point.

20. (Original) The method of claim 17 wherein said wireless communication network includes an antenna assembly and an orbiting satellite system.

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21. (Previously Presented) The method of claim 17 wherein the application data may be received by one or more mobile users.

22. (Original) The method of claim 16 wherein the power plant is controlled from at least the mobile unit and the wearable computer.

Claims 23-28 (Canceled).